

(1) The main hull structure, legs, and supporting structure must comply with Section 3/4.3 of the Rules.

(2) The calculations required by Section 3/4.3 of the Rules must assume the vessel to be in the most adverse loading conditions described by Sections 3/2.1 and 3/4.1 of the Rules.

(3) Unless otherwise agreed upon by the Commandant (CG-521), the calculations on column-buckling required by Section 3/4.3 of the Rules, must employ an effective-length factor, “K”, of not less than 2.0.

(4) The calculations on single-rack jacking systems required by Sections 3/2.1 and 3/4.1 of the Rules must include an extra bending moment caused by the most adverse eccentric loading of the legs.

(b) Standards of classification societies other than the ABS, and other established standards acceptable to the Commandant (CG-521), may be used.

(c) Upon submittal of the plans required by §§127.110 and 133.130 of this subchapter, the standard used in the design must be specified.

(d) If no established standard is used in the design, detailed design calculations must be submitted with the plans required by §§127.110 and 133.130 of this subchapter.

[CGD 82-004 and CGD 86-074, 62 FR 49352, Sept. 19, 1997, as amended by USCG-2007-29018, 72 FR 53966, Sept. 21, 2007; USCG-2009-0702, 74 FR 49235, Sept. 25, 2009]

#### § 134.150 Liftboat-jacking systems.

(a) For this subchapter, liftboat jacking systems are vital systems and must comply with Sections 4/1.13.1 through 4/1.13.3 of the ABS’s “Rules for Building and Classing Mobile Offshore Drilling Units” as well as meet the applicable requirements of part 128 of this subchapter.

(b) Each control system for a liftboat jacking system must be designed so that loss of power, loss of pressure in the hydraulic system, or low hydraulic-fluid level will activate a visible and audible alarm at the operating station and will not result in the liftboat’s uncontrolled descent.

#### § 134.160 Freeboard markings.

Freeboard markings required by §174.260 of this subchapter must be

both permanently scribed or embossed and painted white or yellow on a dark background.

#### § 134.170 Operating manual.

(a) Each liftboat must have aboard an operating manual approved by the Coast Guard as complying with this section.

(b) The operating manual must be available to, and written so as to be easily understood by, the crew members of the liftboat and must include the following:

(1) A table of contents and general index.

(2) A general description of the vessel, including—

- (i) Major dimensions;
- (ii) Tonnages; and
- (iii) Load capacities for—
  - (A) Various cargoes;
  - (B) Crane hook; and
  - (C) Helicopter-landing deck.

(3) Designed limits for each mode of operation, including—

- (i) Draft;
- (ii) Air gap;
- (iii) Wave height;
- (iv) Wave period;
- (v) Wind;
- (vi) Current;
- (vii) Temperatures; and
- (viii) Other environmental factors.

(4) The heaviest loads allowable on deck.

(5) Information on the use of any special cross-flooding fittings and on the location of valves that may require closure to prevent progressive flooding.

(6) Guidance on preparing the vessel for heavy weather and on what to do when heavy weather is forecast, including when critical decisions or acts—such as leaving the area and heading for a harbor of safe refuge, or evacuating the vessel—should be accomplished.

(7) Guidance on operating the vessel while changing mode and while preparing the vessel to make a move, and information on how to avoid structural damage from shifting loads during heavy weather.

(8) Information on inherent operational limitations for each mode and on changing modes, including pre-loading instructions.